

Recommendations #1

General

- Operate the SLR on 1 photon level only (?)
- Higher system stability is a prerequisite for smaller biases
- Maintain maximum system delay stability (selection of components, environment, procedures..)
- Permanently try to identify new possible bias sources
“.. Suspect everything ..” Herstmonceux, 2015
- Repeatedly check the individual contributors using more accurate references
- Calibrate and maintain the laser emission epoch vers. UTC

Recommendations #2

SLR system calibration

- Use optically correct calibration targets
2D hollow retro recommended for separate T/R
- Use efficient spatial filtering
small FoV suppresses spurious reflections
- Ensure perfect alignment of the receiver optics
(star tracking / scanning is a good check)
- Use multiple targets at different az and range
check the system delay consistency
- Re-survey the targets geometry regularly
use various scales, techniques,.....
- Keep detailed record of all system modifications,
report any modification to ILRS